

REMARKS

This paper is responsive to the Office Action mailed January 12, 2009. Upon entry of the present Amendment, claims 1 and 13 will have been amended, and claims 2 and 14 will have been cancelled without prejudice or disclaimer, and while reserving the right to pursue these claims in one or more divisional or continuation applications. Applicants note that the subject matter of claim 2 has been incorporated into claim 1, and the subject matter of claim 14 has been incorporated into claim 13, and thus, no new matter has been added. Thus, upon entry of this Amendment, claims 1, 3-13, and 15-16 are under consideration by the Examiner, of which claims 1 and 13 are independent.

Applicants note that upon entry of the present Amendment, amendments to the Specification will have been made to include language originally provided by the original claims, and thus, no new matter has been added.

Claim Rejections – 35 U.S.C. § 102(b)

The Office Action rejects claims 1 and 3-16 under 35 U.S.C. § 102(b) as being anticipated by Saito (PCT/JP02/09946; US 2004/02509129).

Applicants respectfully note that claim 14 has been cancelled and claim 1 has been amended to even further clarify the language of the claims. Applicants respectfully submit that Saito neither anticipates nor renders obvious the pending claims. In particular, Applicants respectfully submit that Saito fails to disclose or suggest the following:

A solder composition made of a uniform mixture of a liquid substance and solder particles; wherein the liquid substance comprises a flux component which reacts at a melting point of the solder particles; the mixture of the liquid substance and solder

particles has a viscosity that flows at room temperature and deposits in layers on a base material; and the solder particles are mixed in the liquid substance at room temperature, and are granular agents that precipitate in the liquid substance towards the base material, having a mixing ratio and a particle diameter to be uniformly dispersible within the liquid substance, wherein the mixing ratio of the solder particles is less than or equal to 30wt%.

Accordingly, Applicants respectfully submit that the outstanding rejection is rendered moot and respectfully request withdrawal of this rejection.

Claim Rejections – 35 U.S.C. § 103(a)

The Office Action rejects claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Saito in view of Ono et al. (US 2003/0047034).

Applicants note that claim 2 has been cancelled upon entry of this amendment. However, to the extent that claim 1 has been amended to incorporate the features of claim 2, Applicants respectfully submit that the Office Action fails to establish a *prima facie* case of obviousness. In establishing a *prima facie* case of obviousness, the Manual of Patent Examining Procedure (MPEP) sets forth three basic requirements. In particular, there must be 1) some motivation (or at least some “reason”) to combine the cited references (MPEP 2143.01); 2) a reasonable expectation of success (MPEP 2143.02); and 3) the combination teaches each and every element of the claimed invention (MPEP 2143.03).

In the obviousness-type rejection of claim 2, the Office Action refers back to the Non-Final Action of August 14, 2008, and reasserts that using “0.1 g -100 g of solder metal to 100 grams of dispersing medium (c_r the claimed mixing ratio of the solder particles equal to or less

than 30wt%)” (Office Action dated August 14, 2008, pgs. 6-7) as disclosed by Saito in view of Ono, would have been obvious.

Applicants have reviewed the Ono document and respectfully submit that it appears that the Office has misread the disclosure of Ono cited as relevant by the Office Action. Applicants respectfully submit that the disclosure referenced by the Office, when read along with the surrounding disclosure, merely refers to compositions existing at the time of the dispersion of particles for the *initial processing of the solder particles*, rather than for the final solder composition itself. In particular, Applicants note that the relevant disclosure, when read in combination, for example, with ¶ [0089], emphasizes a preparation stage of the process rather than a final solder composition. Thus, Applicants respectfully submit that the Office’s cited disclosure is irrelevant and, further, that Saito and Ono are not combinable to arrive at the subject matter of the pending claims.

Applicants also note that Saito appears to disclose, at ¶ [0112], that “[t]he content of the flux in the solder paste is usually 1-50 wt%, specifically 5 to 30 wt%, more specifically 5 to 15 wt% of the total weight of the solder paste. With less than 50 wt% or more than 99 wt% solder powder, required solder printability is not obtained, thus not being preferred.” Thus, assuming, *arguendo*, that the disclosures of Saito and Ono are relevant, Saito teaches away from any combination with Ono in the range cited (0.1 g -100 g of solder metal to 100 grams of dispersing medium) by the Office Action. Thus, Applicants submit that the documents are not combinable to arrive at the subject matter of the pending claims.

Moreover, Applicants respectfully note that a component ratio of a solder paste in Ono is described at ¶¶ [0092] and [0093], rather than the disclosure cited by the Office Action. Applicants respectfully note that ¶¶ [0092] states that “the fine metal particles (powder) obtained

by the aforementioned manufacturing method can be employed at a ratio of 85-92% by weight (flux: 8-15% by weight) based on a solder paste.” Thus, Applicants respectfully submit that even if the documents are combined, Ono fails to cure the deficiencies of Saito because the hypothetical combination fails to disclose each and every element of the pending claims. Applicants note that by setting the mixing ratio of the solder particles in accordance to the pending claims, the claimed invention can provide the effect of obtaining a mixture in which solder particles are uniformly dispersed.


For at least the foregoing reasons, Applicants submit that the cited documents do not render the present claims obvious and respectfully request withdrawal of the rejections under this reference.

CONCLUSION

For at least the foregoing reasons, it is respectfully submitted that all pending claims are patentably distinct over the documents employed in the rejection of record. Applicants request reconsideration and withdrawal of the rejections of record. Allowance of the application with an early mailing date of the Notices of Allowance and Allowability is therefore respectfully requested.

If there should be any questions, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully Submitted,
Isao SAKAMOTO et al.


Bruce H. Bernstein
Reg. No. 29,027

April 7, 2009
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

Stephen M. Roylance
Reg. No. 31,296